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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/729,422	12/05/2000	Dieter Busch	741124-63	6466

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NIXON PEABODY LLP
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EXAMINER

REIS, TRAVIS M

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,422

Applicant(s)

BUSCH, DIETER

Examiner

Travis M Reis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15 is/are pending in the application.
- 4a) Of the above claim(s) 13, 14 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 4 is rejected under 35 U.S.C. 102(e) as being anticipated by Lysen (U.S. Patent 6196615).

Lysen discloses in Figure 2 a device (1) for measuring and assessing the mutual alignment of bodies, with at least one optical gyro (11) enclosed within a housing (10), with means (12, i.e., the contact surfaces 12a-12e) for manually transporting and holding the housing in place on a body whose state of alignment is to be determined if so determined, and a high-resolution display device (14) for reproduction of alphanumeric or graphic information, using which an operator can recognize whether and in what manner correction measures can be carried out on the articles to be measured (Figures 1 & 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5, 6, & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen in view of Casby et al. (U.S. Patent 6085428).

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With reference to claim 1, Lysen discloses all of the instant claimed invention as stated above in the rejection of claim 4, but does not disclose the device has means for receiving and processing voice commands of an operator and switching the device into an altered machine status based on the voice commands.

Casby et al. discloses a system which uses a voice command feature (10) to control the service system and can use a voice command feature to switch between modes (col. 5 lines 5-9) (Abstract) (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the voice command means feature taught by Casby et al. to the device disclosed by Lysen in order to increase the speed of data transfer.

With reference to claims 2 & 8, Lysen discloses all of the instant claimed invention as stated above in the rejection of claim 4, but does not disclose expressly the device has speech output means for acoustically providing determined measurement results.

Casby et al. disclose the system includes a speech output means feature (58) for providing data (col. 4 lines 30-33). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the speech output means feature taught by Casby et al. to the device disclosed by Lysen in order that a person could quickly receive data.

With reference to claim 5 & 6, Lysen discloses all of the instant claimed invention as stated above in the rejection of claim 4, but does not disclose the device is provided with transmission means for wirelessly receiving or exchanging data, commands and other information with an externally arranged control or a higher-level supervisory computer utilizing infrared light and extremely high frequency radio waves as a data carrier.

Casby et al. disclose a transmitting means feature using infrared (16, 22) (col. 3 lines 34-36) and a high-level computer (68) for processing (Figures 1 & 4). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the transmitting and processing means features taught by Casby et al. to the device disclosed by Lysen in order that the measurement device could send the data to other devices for application.

With reference to claim 12, Lysen discloses a process for measuring and assessing the mutual alignment of bodies, comprising the following steps contacting a measurement probe with a first body which has a reference surface or edge (col. 4 lines 17-18); contacting the measurement probe with a second body which has a measurement surface or a measurement edge (col. 3 lines 1-10); computing geometrical data which describe the mutual orientation of the bodies in a differential manner; outputting of information which has differences of orientation between the first and the second body (col. 4 lines 24-27), on an optical display basis (14), to an operator (Figure 2).

Lysen does not disclose a speech input means which facilitates structured input of dimension data and commands.

Casby et al. discloses a system which uses a speech input feature (Abstract) (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the speech input means feature taught by Casby et al. to the device disclosed by Lysen in order to increase the speed of data transfer.

5. Claims 2, 3, & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen in view of Puyo et al. (U.S. Patent 4551921).

With reference to claim 2, Lysen discloses a device for measuring and assessing the mutual alignment of bodies with an optical gyro.

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Lysen does not disclose expressly the device has speech output means for acoustically providing determined measurement results.

Puyo et al. discloses an apparatus with a voice generator feature (10) (col. 3 lines 36-39). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the voice generator feature taught by Puyo to the device disclosed by Lysen in order that a person could quickly receive data.

With reference to claims 3 & 15, Lysen does not disclose the device has ergonomically attached individual keys (32) on a handle for actuation by the thumb or forefinger which, when actuated by an operator, causes storage of an individual measured value out of a time-sequential succession of measured values.

Puyo et al. disclose a handle feature (7) with a key feature (10) for actuation by the thumb and forefinger which causes storage of an individual measured value (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the handle and key features taught by Puyo et al. to the device disclosed by Lysen in order that the device is easier to handle after measurements are taken, and have said measurements easily called up again at a later time.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen & Puyo et al. as applied to claims 2, 3, & 15 above, and further in view of Hall et al. (U.S. Patent 5554975).

Lysen & Puyo et al. disclose all of the instant claimed invention as stated above in the rejection of claims 2, 3, & 15, above, but do not disclose an antenna for transmitting and receiving extremely high radio waves integrated into the handle of the device.

Hall et al. disclose a device which has within its handle an antenna for transmitting and receiving extremely high radio waves in order to alert someone of a problem. Therefore, it

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would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the antenna disclosed by Hall et al. to the handle disclosed by Lysen & Puyo et al. in order that a user is alerted that there is a problem with the data collection.

7. Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen & Casby et al. as applied to claims 1, 2, 5, 6, & 8 above, and further in view of Rodloff et al. (U.S. Patent 5408751).

Lysen & Casby et al. disclose all of the instant claimed invention as stated above in the rejection of claims 1, 2, 5, 6, & 8, but do not disclose expressly the value acquisitions being made in a stochastic, nonperiodic manner.

Rodloff discloses a high resolution gyro system for precise angular measurement in which values are recorded in random points in time (col. 9 line 14-5). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the means disclosed by Rodloff to the device taught by Lysen & Casby et al. in order that the time intervals of the measured value acquisitions are irregularly distributed to prevent value drift error.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lysen & Casby et al. as applied to claims 1, 2, 5, 6, & 8 above, and further in view of Nower (U.S. Patent 5980094).

Lysen & Casby et al. disclose all of the instant claimed invention as stated above in the rejection of claims 1, 2, 5, 6, & 8, but do not disclose expressly the externally arranged control or higher level supervisory computer has means for acquiring averaging measured values at a selected measurement site for ascertaining the spatial orientation of bodies or the device in a time sequential manner with a measurement frequency at which current

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mechanical acceleration values with comparatively low intensity are represented or assume a minimum value.

Nower discloses an analysis of alignment data wherein the externally arranged control or higher level supervisory computer has means for acquiring averaging measured values at a selected measurement site for ascertaining the spatial orientation of bodies or the device in a time sequential manner with a measurement frequency at which current mechanical acceleration values with comparatively low intensity are represented or assume a minimum value (cols. 3 & 4, lines 49 & 4-12). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the means disclosed by Nower to the computer taught by Lysen & Casby in order for ascertaining the spatial orientation of bodies to know if they are out of alignment.

Allowable Subject Matter

9. Claim 10 is allowed.

10. The following is an examiner's statement of reasons for allowance:

With reference to claim 10, the prior art of record does not disclose or clearly suggest a device with computer means for performing an averaging measured value acquisition which excludes the frequency ranges of a technical line, in combination with the remaining limitations in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Response to Arguments

11. In response to applicant's argument that Lysen has no means for manually holding the housing in place: This argument is not persuasive, since in a broad sense, the housing provide manual means for handling said device as disclosed in paragraph 2 above.

Furthermore, Lysen does not exclude manually holding the housing in place since no particular means for ^{mounting} ~~mounted~~ are disclosed.

12. In response to applicant's argument that there is no suggestion to combine the references of Lysen and Casby, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Casby reference is only used as an example of the obvious advantageous features of voice recognition in the alignment art, ^{which} ~~in~~ Lysen and Casby share in common, as stated ⁱⁿ paragraph 4 above.

13. In response to applicant's argument that there is no suggestion to combine the references of Lysen and Puyo et al., the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Puyo et al. reference is only used as an example of the obvious advantageous features of speech output and handles in

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the measurement art which Lysen and Puyo et al. share in common, as stated in paragraph 5 above.

14. In response to applicant's argument that there is no suggestion to combine the references of Lysen & Puyo et al. and Nower, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Nower reference is only used as an example of the obvious advantageous features of data analysis in the measurement art, which Lysen, Puyo et al. & Nower, all share in common, as stated in paragraph 8 above.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M Reis whose telephone number is (703) 305-4771. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (703) 308-3875. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Diego Gutierrez
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